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HEWLETT-PACKARD COMPANY
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EXAMINER

CHACE, CHRISTIAN

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,720

Applicant(s)

SPENCER ET AL.

Examiner

Christian P. Chace

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,12-14,16-18,20-27 and 30-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6,8,9,12-14,16-18,20-27 and 30-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Office action has been issued in response to amendment filed 19 April 2005. Claims 1-6, 8-9, 12-14, 16-18, 20-27, and 30-33 are pending. Applicants' arguments have been carefully and respectfully considered, but they are not entirely persuasive, even in light of the instant amendment, which has necessitated new grounds for rejection. Accordingly, this action has been made FINAL, as necessitated by amendment. Examiner notes that any rejections and/or objections not repeated herein have been withdrawn in light of the instant amendment.

Admitted Prior Art

It is important to note that claims 20-22 and 24-25 were rejected based on the examiner's assertion of official notice. As noted in MPEP 2144.03 (C.):

"If applicant does not traverse the examiner's assertion of official notice...the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate."

Accordingly, applicants failed to traverse *the assertion of official notice* of claims [11,] 20-22, 24-25, [and 28-29]; and, therefore the facts that, "...it is well-known to those of ordinary skill in the art that a user may perform the functions that firmware can perform, and that to do so, the relevant information must be displayed for the user to see. The display being a screen or a window on a screen are known. Where the

information is displayed is a mere matter of design choice," (See previous Office action, page 22), are taken to be admitted prior art.

In addition, the facts that, "...it would have been obvious to one of ordinary skill in the art at the time of the invention...to display the real-time information of the write counts in order to allow the user to make the determinations made (wear-level every predetermined number of writes) by the firmware, as made hackneyed in the state of the art," (See previous Office action, page 22), are taken to be admitted prior art.

Further, the facts that, "...it is very well known in the art that music files, image files, and formatting require writes," (See previous Office action, page 22), are taken to be admitted prior art.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **all of the limitations of claims 2-16, 18, and 20-33 must be shown** or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

A Note on Claim Interpretation

MPEP 2111 [R-1] Claim Interpretation; Broadest Reasonable Interpretation

**CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE
INTERPRETATION**

During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).< Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969) (Claim 9 was directed to a process of analyzing data generated by mass spectrographic analysis of a gas. The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejection, the examiner explained that the claim was anticipated by a mental process augmented by pencil and paper markings. The court agreed that the claim was not limited to using a machine to carry out the process since the claim did not explicitly set forth the machine. The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject

matter from the specification into the claim.). See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999) (The Board's construction of the claim limitation "restore hair growth" as requiring the hair to be returned to its original state was held to be an ** >incorrect< interpretation of the limitation. The court held that, consistent with applicant's disclosure and the disclosure of three patents from analogous arts using the same phrase to require only some increase in hair growth, one of ordinary skill would construe "restore hair growth" to mean that the claimed method increases the amount of hair grown on the scalp, but does not necessarily produce a full head of hair.).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 14, 30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruce et al (US Patent 6,000,006).

With respect to independent claim 14, a data structure in a memory card, comprising, computer readable storage containing at least one event descriptor about usage of the memory card, and for each event descriptor a count representing the number of occurrences of that event is disclosed in the abstract as the write counts. Claims rejected supra discuss the write counts being stored on the memory card.

For each of a plurality of event descriptors an amount of memory used by an aggregation of events corresponding to a respective each of the event descriptors is disclosed in figure 6, #44, where the amount of memory is the physical block being associated with the address in the mapping table shown.

With respect to independent claims 30 and 32, a method and apparatus for storing memory card usage information in a memory card is disclosed in the abstract. A memory card is disclosed, for example, in column 6, lines 40-41.

Collecting information about usage of the memory card and recording information about usage of the memory card in an area of the memory card is disclosed in the abstract.

Accessing the information about usage of the memory card from the memory card is disclosed in the abstract as well as in figure 6, which shows an arrow from the write counters, which shows them being "accessed." The write counters are stored in the memory card as discussed in column 6, line 45. (The counters are stored in the re-map table, which is stored in the flash card.)

Accessing the information about usage of the memory card from the memory card, wherein the information about usage of the memory card comprises the number of times data was "corrected" by the memory card is disclosed in column 5, lines 5-12, where data is corrected or kept correct, by wear-leveling based on the total number of writes to a particular section. This effectively keeps track of the number of times data was corrected by preventing it from having to be corrected, i.e., the number of times data is corrected is zero. Examiner notes that the claim limitations are listed in the alternative (at least one of A and B), and, therefore, only requires one of the limitations of this section of the claim to be met in order to anticipate this section of the claim.

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al (US Patent Application Publication #2002/0107832).

With respect to independent claim 14, computer readable storage is disclosed in figure 1, #726.

The storage containing at least one event descriptor about the usage of the memory card is disclosed in figure 4 as advertisement usage information.

A count representing the number of occurrences of that event is disclosed in figure 9, #S1205. Advertising usage information is "information about the usage of the memory card," as discussed supra with respect to claim 1. Paragraph 98 discloses changing a count as, "updat[ing] the number of accesses to the web (recorded in advertisement usage information)." Access to the web is "the event," and the number of times the web is accessed is the "event descriptor" that counts the number of times the event occurs.

An amount of memory being used by an aggregation of events corresponding to respective each of the event descriptors (see supra) is inherent – if data of any kind is to be saved, there must be a place to save it. Also, figure 5 shows a table that relates to the 2nd content identifier of figure 4, as also discussed supra with respect to claim 9. In other words, figure 5 is a table that represents an amount of memory being used by an aggregation of the events corresponding to the respective content identifier (2nd content identifier).

Claims 23-26 and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Himoto et al (US Patent #6,478,679).

With respect to independent claim 23, examiner must first point out that “storing the usage of the memory card on the memory card” has been interpreted as storing the usage of the memory card *in* the memory of the card. Also, “usage of the memory card” is very broad, and may comprise any number of things, for example, as discussed supra with respect to claim 1. In this case, examiner has interpreted “usage of the memory card” as the type of games stored and the respective scores, for example, as shown in figure 7, 8A, and 8B, as they are activities stored on the card that are used by the card.

These figures also show a portable memory card, as discussed in the abstract.

As storing the usage activities is shown as discussed supra, inherently those activities are “monitored” if they are stored. For example, the score is recorded with the game title. Therefore, the game is “monitored” by keeping track of the score.

Displaying the usage activity on the memory card is shown in figure 3 as a LCD. This is also discussed in the abstract, for example.

With respect to claims 24-25, displaying the usage IN a window on the memory card or on a screen on the memory card are disclosed, as discussed supra, in figures 7 and 8, which show LCD 14 of figure 3, discussed supra with respect to claim 23.

With respect to claim 26, monitoring the amount of remaining free space on the memory card is disclosed in figures 5 and 6 as “Empty Region.”

With respect to independent claims 30 and 32, collecting information about usage of the memory card is disclosed in figures 7, 8A, and 8B, for example. “Usage of

the memory card," is interpreted by examiner to mean the games played using the memory card, #10. The information collected are the games.

Recording the information about usage of the memory card in an area of the memory card is also disclosed in figures 7, 8A, and 8B, for example. As discussed in column 12, lines 37-38, a list of stored data is shown. The data being stored, or recorded, on the memory card 10 is discussed in column 12, line 49.

Accessing the information about usage of the memory card from the memory card is disclosed in column 12, lines 44-46, the particular game is selected, thereby accessing the information about the usage of the memory card.

The information about usage of the memory card comprising at least one of a measurement of how full the memory card is and the number of times data was corrected by the memory card is discussed in column 10, lines 64-67, as shown in figures 5A-E and 6A-C, for example, which shows how full the memory card is. As applicants have not claimed whether this is a quantitative or qualitative measurement, examiner has interpreted the display of the figures to be a qualitative measurement, as the user can see about how much of the memory is full. Examiner notes that the instant claim language of "at least one of," merely requires one of the two possible limitations to be anticipated to anticipate the entire limitation.

Examiner notes that claim 30 is a method claim that is anticipated by the instantly cited prior art of record. Accordingly, apparatus to perform the anticipated method (claim 32) is also anticipated, as discussed supra with respect to claims 1 and 16.

With respect to claims 31 and 33, the information about usage of the memory card comprising a measurement of how full the memory card is disclosed as discussed supra with respect to claims 30 and 32, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-9, 12-13, 16-17, 23, and 26 are rejected under 35 U.S.C. 103(a) as obvious over Bruce et al (US Patent 6,000,006).

With respect to independent claims 1, as well as 16 and 17, Bruce et al disclose a method and apparatus for storing memory card usage information in a memory card is disclosed in the abstract. A memory card is disclosed, for example, in column 6, lines 40-41.

Collecting information about usage of the memory card and recording information about usage of the memory card in an area of the memory card is disclosed in the abstract.

Accessing the information about usage of the memory card from the memory card is disclosed in the abstract as well as in figure 6, which shows an arrow from the write counters, which shows them being "accessed." The write counters are stored in the memory card as discussed in column 6, line 45. (The counters are stored in the re-map table, which is stored in the flash card.)

Displaying the information about the usage of the memory card on a display on the memory is printed matter not functionally related to the memory card's method of operation. Writing the results of the previous steps and apparatus, as disclosed by Bruce et al, on the storage media on a sticker on that storage media is a mental step completed via a pen and paper.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Bruce et al before him/her, to keep track of the number of writes on a flash memory on a sticker on the flash memory, in order to keep track of how many times the memory has been written to, in order to provide even wear, as disclosed by Bruce et al in the abstract, for example. By simply writing on a sticker on the memory slash marks, e.g., one could keep track of how many times the memory has been written without having to add all of the circuitry, thereby reducing the manufacturing costs, e.g.

In addition, it is well settled that if the difference between the claimed invention and the prior art lies solely in the printed matter, then this difference cannot patentably distinguish over the prior art unless the printed matter is functionally related to the substrate. See MPEP 2106, *In re Gulack*, 217 USPQ 401, CAFC 1983; *Ex parte Breslow*, 192 USPQ 431, BdPatApp&Int 1975.

With respect to claim 2, "monitoring" write events is disclosed in the abstract. "monitoring" is defined as keeping watch over. Inherently, by counting the number of writes, the system is keeping watch over those write events. Monitoring read events is disclosed in column 7, line 35. Monitoring power-on events is inherent in light of the

definition of monitoring discussed herein – power must be applied for the system to work. If power is applied, it is monitored.

With respect to claim 3, changing a count associated with an event descriptor when an event occurs is disclosed in the abstract as a write count.

With respect to claim 4, storing a “value parameter” associated with said event descriptor when said event occurs is disclosed in the abstract as a write count.

With respect to claim 5, changing a running total associated with said event descriptor when said event occurs is disclosed in column 7, lines 10-11 and in figure 6, #46 as a total write count.

With respect to claim 6, recording information about usage in a dedicated area in said memory card is disclosed in column 6, line 47 as well as in figure 6, #46.

With respect to claim 8, changing a count associated with an event description when the event occurs is disclosed as incrementing the counter in column 3, lines 5-15. Displaying the count is disclosed in figure 6, #46. The count is “displayed” to the wear-level controller, e.g.

With respect to claim 9, a plurality of event descriptors are disclosed in figure 6, #46 and #48, e.g. Displaying them is disclosed in figure 6, #46 and #48, as discussed supra with respect to claim 8. Each of the plurality of event descriptors being “selectable” is disclosed in column 3, lines 17-23, where they are “selected” by the logical address, e.g. Additional “usage information” being displayed upon selection associated with the respective event descriptor is disclosed in figure 6, #52 – the valid bit.

With respect to claim 12, creating write and read commands allowing the host to store the information about usage and reading that information is inherent in the system of Bruce et al. A computer must be told what to do – see figures 4 and 6, e.g.

With respect to claim 13, changing a count associated with an event descriptor when the event occurs, comparing the count to a threshold, and, if the threshold is equaled or exceeded, then causing a message to be sent is disclosed in column 13, lines 20-25.

With respect to independent claim 23; claims 1 and 8, as addressed supra, anticipate/render obvious the claim limitations as discussed supra with respect to same.

With respect to claim 26, monitoring an amount of memory used in the memory card, and monitoring an amount of memory remaining free on the memory card is disclosed as keeping track of whether given sections of memory have been wear-leveled or not by counting the total number of writes ever written to that memory area, as discussed in column 10, lines 30-32.

Claims 1-6, 8-9, 12-13, 16-17, and 20-22 are rejected under 35 U.S.C. 103(a) as obvious over Shimizu et al (US Patent Application Publication #2002/0107832).

With respect to independent claims 1 and 16, a method and system for storing memory card usage information on a memory card is disclosed in the title as an apparatus and method for outputting control information. Examiner interprets “information about usage of the memory card” to be any data that has to do with how

the memory card is used. A memory card is disclosed in paragraph 59 as control information storage unit, #726 in figure 1.

Collecting information about the usage of the memory card is disclosed in paragraphs 59 and 61 as generating use condition information and billing information, as well as advertisement usage information (which is based on the content selected and stored on the memory card – see paragraph 65, for example), which is also stored in control information storage unit 726, as discussed in paragraph 67.

Recording the information about usage of the memory card in an area of the memory card is disclosed in paragraph 61 as the generated use condition information and the billing information being recorded in the control information storage unit 726.

Accessing the information about usage is disclosed in paragraph 61 as, “using the generated use condition information.” If the information is “used,” it is inherently “accessed.”

Displaying the information about the usage of the memory card on a display on the memory is printed matter not functionally related to the memory card’s method of operation. Writing the results of the previous steps and apparatus, as disclosed by Shimizu et al, on the storage media on a sticker on that storage media is a mental step completed via a pen and paper.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Shimizu et al before him/her, to keep track of how many times the user can use the card to rent movies. By simply writing on a sticker on the memory slash marks, e.g., one could keep track of how many times the

card has been used without having to add all of the circuitry, thereby reducing the manufacturing costs, e.g.

In addition, it is well settled that if the difference between the claimed invention and the prior art lies solely in the printed matter, then this difference cannot patentably distinguish over the prior art unless the printed matter is functionally related to the substrate. See MPEP 2106, *In re Gulack*, 217 USPQ 401, CAFC 1983; *Ex parte Breslow*, 192 USPQ 431, BdPatApp&Int 1975.

With respect to claim 2, figure 6 is an example of the generated use condition information, which discloses "number of times reproduction is possible," ("monitoring" write events), "whether copying is allowed," ("monitoring" read events – the data must inherently be read in order to be copied. In other words, if it is not read, it cannot be rewritten as the copy) and "monitoring" power-on events, which is inherent in that if the card collects usage information about the card in an area of the card, as discussed supra with respect to claim 1, then the card must, inherently, be powered on for those transactions, and by "monitoring" the transactions, power-on events are also inherently "monitored." "Monitoring" is interpreted by examiner as the system "being aware" of the transaction. By performing the transaction, the system must, inherently, be aware of it.

With respect to claim 3, the collecting step comprising changing a count associated with an event descriptor when the event occurs is disclosed in figure 9, #S1205. Advertising usage information is "information about the usage of the memory card," as discussed supra with respect to claim 1. Paragraph 98 discloses changing a count as, "updat[ing] the number of accesses to the web (recorded in advertisement

usage information).” Access to the web is “the event,” and the number of times the web is accessed is the “event descriptor” that counts the number of times the event occurs.

With respect to claim 4, the collecting step further comprising storing a “value parameter” associated with said event descriptor when the event occurs is disclosed in figure 4, and discussed supra, as the “number of times (the website is accessed).”

With respect to claim 5, the collecting step comprising changing a running total, or count, associated with said event descriptor when the event occurs is disclosed in paragraph 98 as discussed supra with respect to claim 3.

With respect to claim 6, recording the information about usage in a dedicated area in said memory card is disclosed in figure 4, for example. Also, this is inherent in that all data stored in a computer memory is in a “dedicated” area – that area is dedicated to whatever data is stored there.

With respect to claim 8, changing a count associated with an event description when the event occurs, and wherein the accessing step comprises displaying the count is disclosed in figure 4, and the “displaying” is discussed in paragraph 62 into 63. Paragraph 62 discusses the use condition information, explained supra with respect to claim 1, for example. Paragraph 63 discusses the fact that the use condition information contains more particular information, which *shows a user* instruction on how many times the rented digital content may be reproduced, for example. If instructions are being “shown” to a user, they must be “displayed” – this is inherent.

With respect to claim 9, a plurality of event descriptors is disclosed in figure 4. As discussed supra with respect to claim 3, the advertisement usage information contains an "event descriptor," of which "No. times web site is accessed," was specifically mentioned. However, figure 4 discloses a plurality of "event descriptors," such as, "number of times 2nd digital content is reproduced." Displaying these event descriptors is shown in figure 4, as well, and discussed in paragraph 57 as being provided by advertisement sponsors. Similar to examiner's interpretation with respect to claim 8, in order to "provide" this information, it would have to be "displayed." As the descriptor values are provided by the sponsors, they are "selectable." Upon selection, paragraph 57 goes on to refer to a table, shown in figure 5, which is expressed in figure 4 as a "second [content] identifier."

With respect to claim 12, creating "write and read commands" allowing the host to store the information about usage and read that information is disclosed in paragraph 61. Write and read commands are inherent in write and read operations such as "record," "input," and "display" or "show".

With respect to claim 13, changing a count associated with an event descriptor when the event occurs is disclosed as discussed supra with respect to claim 3.

Comparing the count to a threshold, and if the threshold is equaled or exceeded, then causing a message to be sent is disclosed in paragraph 10, with the "message to be sent" being "specifying a digital content identifier." The threshold is the "certain number or more of second identifiers."

With respect to independent claim 17, collecting information about usage of a portable memory card in an electronic device is disclosed in paragraph 61 as generating use condition information and billing information, as well as advertisement usage information (which is based on the content selected and stored on the memory card – see paragraph 65, for example), which is also stored in control information storage unit 726, as discussed in paragraph 67.

Recording the information about usage of the memory card in an area of the memory card is disclosed in paragraph 61 as the generated use condition information and the billing information being recorded in the control information storage unit 726.

Displaying the information about the usage of the memory card on a display on the memory is printed matter not functionally related to the memory card's method of operation. Writing the results of the previous steps and apparatus, as disclosed by Shimizu et al, on the storage media on a sticker on that storage media is a mental step completed via a pen and paper.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Shimizu et al before him/her, to keep track of how many times the user can use the card to rent movies. By simply writing on a sticker on the memory slash marks, e.g., one could keep track of how many times the card has been used without having to add all of the circuitry, thereby reducing the manufacturing costs, e.g.

In addition, it is well settled that if the difference between the claimed invention and the prior art lies solely in the printed matter, then this difference cannot patentably

distinguish over the prior art unless the printed mater is functionally related to the substrate. See MPEP 2106, *In re Gulack*, 217 USPQ 401, CAFC 1983; *Ex parte Breslow*, 192 USPQ 431, BdPatApp&Int 1975.

With respect to claim 20, collecting information further comprising counting a number of times an image file was written to the memory card is disclosed in paragraph 2, as reproducing image data, which, as shown in figure 4, is counted as the number of times the digital content may be reproduced (whether that digital content is image data or otherwise, it is still digital, and will be counted).

With respect to claim 21, the collecting information further comprising counting a number of times music files (audio data) were written to the memory card is disclosed in paragraph 2, as reproducing audio data, which, as shown in figure 4, is counted as the number of times the digital content may be reproduced (whether that digital content is audio data or otherwise, it is still digital, and will be counted).

With respect to claim 22, the collecting information further comprising tracking a number of times the memory card is formatted is disclosed in paragraph 61, as the user information is input by the clerk when the user first becomes a member of the rental store. The rental price (billing information) is calculated using the generated use condition information. Therefore, if the "format" changes, i.e., a different order is placed, so does the billing information, which is inherently "tracked," as it must be in order to "bill" the user.

Claims 20-22 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruce et al (cited supra).

With respect to claims 24-25, Bruce et al disclose the claim limitations of the claim upon which the instant claims depend and/or include. Bruce et al additionally disclose the system firmware updating the total and incremental write counts every 1,000 writes, e.g., in column 10, lines 31-32.

The difference between Bruce et al and the instant claim is the explicit recitation of displaying of the real-time information (the counts of Bruce et al are “real-time,” and in a host system or “on” the memory card) in a window on a screen. It is important to note that the system of Bruce et al may be considered a memory card system, with a display “on” the memory card.

However, it is well known to those of ordinary skill in the art that a user may perform any of the functions that firmware can perform, and that to do so, the relevant information must be displayed for the user to see. The display being a screen or a window on a screen are known. Where the information is displayed is a mere matter of design choice. The examiner takes OFFICIAL NOTICE of this teaching.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Bruce et al before him/her, to display the real-time information of the write counts in order to allow a user to make the determinations made (wear-level every predetermined number of writes) by the firmware of Bruce et al, as made hackneyed in the state of the art.

Examiner notes that this has been taken as admitted prior art, as discussed *supra*, in accordance with MPEP 2143.03 (C.).

With respect to claims 20-22, Bruce et al disclose the write counters counting the number of writes for wear-leveling.

The difference between Bruce et al and the respective claim limitations is that the writes are image files, music files, or formats.

However, it is very well known in the art that music files, image files, and formatting require writes. The examiner takes OFFICIAL NOTICE of this teaching.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Bruce et al before him/her to count all writes to the memory for the purpose of wear-leveling to extend the life of the memory, as taught by Bruce et al.

Examiner notes that this has been taken as admitted prior art, as discussed *supra*, in accordance with MPEP 2143.03 (C.).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al (cited *supra*) and Bruce et al (cited *supra*), each taken separately; in view of Bueno (US Patent # 5,532,689).

Shimizu et al and Bruce et al, each taken separately, disclose the subject matter of the claims upon which the instant claim depends.

Shimizu et al and Bruce et al, each taken separately disclose collecting information.

The difference between Shimizu et al and Bruce et al, each taken separately; and the instant claim is the information collected further comprising counting physical insertions of the memory card in the electronic device.

Bueno discloses counting the number of times a memory card is inserted into an electronic device in the abstract as an access count.

Accordingly, it would have been obvious to one of ordinary skill in the art having the teachings of Shimizu et al and Beuno before him/her, to utilize the access counting of Bueno in the system of Shimizu et al and Bruce et al, each taken separately, as the access counting allows fraud prevention, as discussed by Bueno in column 3, lines 20-25.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Himoto et al (cited supra) and Bruce et al (cited supra), each taken separately; in view of No (US Patent #6,587,140).

Himoto et al and Bruce et al, each taken separately, disclose the subject matter of the claims upon which the instant claim depends.

Himoto et al disclose providing a portable memory card in a digital video game system. Bruce et al disclose a portable memory card as discussed supra.

The difference between Himoto et al and Bruce et al, each taken separately; and the instant claim is the memory card being in a digital camera.

No discloses a memory card for use in a digital camera.

Accordingly, it would have been obvious to one of ordinary skill in the art having the teachings of Himoto et al and Bruce et al, each taken separately; and No before

him/her, to utilize the portable memory card of Himoto et al and Bruce et al, each taken separately; in the camera of No as it allows for a completely portable, untethered camera design, as disclosed by No in column 1, lines 40-43.

Response to Arguments

With respect to applicants' arguments that the claim limitations are already shown in figures 1 and 2 because they are further discussed in the specification, is not persuasive. Indeed, upon the instant amendments, the flow charts of figures 1 and 2 do not even suggest a memory with a display on it. The public is entitled to drawings that clearly show the claimed invention, as much as the Office is entitled to drawings that clearly show the claimed invention in order to provide accurate search results for future applicants. Applicants continue by asserting that an understanding of the subject matter to be patented, as embodied in the claims, is clear from figure 1. Applicants have claimed data structures and systems, for example, (see claims 14 and 16, e.g.) that are clearly not appropriately shown in a three-box flow chart (see figure 1 or 2). This certainly does not amount to an "unnecessary and burdensome requirement," as applicants assert. Providing accurate drawings of the claimed invention is a reasonable request for the reasons discussed supra, and is no more burdensome than the inherent "burdens" of filing an application and prosecuting it. Examiner refers applicants to MPEP 608.02 (d), which discusses:

"Any structural detail that is of sufficient importance to be described should be shown in the drawing. (*Ex parte Good*, 1911 C.D. 43, 164 O.G. 739 (Comm'r Pat. 1911)."

With respect to applicants' arguments regarding the 35 USC 101 rejections, they have been removed in light of same.

Although applicants did not address the 35 USC 112 rejection in the previous Office action, it has been overcome by the instant amendments as well, and has accordingly, been removed.

With respect to applicants' arguments that the cited prior art of record, as discussed in the previous Office action, does not anticipate or render obvious the instant claim language, examiner notes that many of these arguments are moot in light of the new grounds for rejection as necessitated by amendment.

Specifically, with respect to applicants' argument that Bruce does not disclose "displaying the information about the usage of the memory card on a display on the memory card," examiner notes that this is anticipated and/or obvious in light of the fact that merely requires a sticker on the memory card upon which marks may be made as the card is used by a user for different things. As discussed supra, this does not constitute a patentable distinction.

With respect to applicants' argument that Bruce does not disclose "wherein for each of a plurality of event descriptors an amount of memory used by an aggregation of events corresponding to respective each of the event descriptors," examiner respectfully disagrees. Block addresses represent amounts of memory "corresponding to" event descriptors.

With respect to applicants' argument that Bruce does not disclose "wherein the information about usage of the memory card comprises at least one of a measurement

of how full the memory card is and the number of times data was corrected by the memory card," examiner respectfully disagrees, and notes that the number of times data is corrected is zero, as a result of the wear-leveling, as discussed in the rejection. In addition, examiner directs applicants to a further discussion of the relationship between wear-leveling and ECC in columns 9 and 10 as they relate to figure 8 of Bruce et al.

With respect to applicants' argument regarding Shimizu et al, examiner reiterates his responses throughout prosecution, as no new arguments have been presented. "Usage information" and "usage of a memory card" are very broad terms. To date, throughout the entire prosecution of the instant application, applicants still have not pointed to any definition in the instant specification, or even dictionary, but merely have discussed what the terms are not. This does not constitute a persuasive response.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian P. Chace whose telephone number is 571.272.4190. The examiner can normally be reached on MAXI FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571.272.4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Chace', followed by a long horizontal line extending to the right.

Christian P. Chace
Primary Examiner
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